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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/719,745

11/21/2003

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CODO-45506

3145

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EXAMINER

ROBINSON, MYLES D

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

06/14/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/719,745 | <b>Applicant(s)</b><br>EDWARDS ET AL. |  |
|                              | <b>Examiner</b><br>Myles D. Robinson | <b>Art Unit</b><br>2625               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 16, 23 - 28 and 30 - 48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 16, 23 - 28, 30 - 32, 35 - 38 and 40 - 48 is/are rejected.
- 7) ☒ Claim(s) 33, 34 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment was received on 3/10/2010. These amendments have been entered and made of record. Currently, **claims 1 – 16, 23 – 28 and 30 – 48** are pending.

### *Response to Arguments*

2. Applicant's arguments (*see Remarks 3/10/2010*) have been fully considered but they are not persuasive.

Regarding **claims 1, 10, 23, 27 and 41**, the Applicant argues that **Watts et al.** (U.S. Patent No. 6,559,971) does not disclose, teach or suggest receiving, with a multi-media printer, a print operation transmitted from a print client device comprising a first media selection parameter to be utilized for selecting a first medium to be used for the print operation. Succinctly, the Applicant contends that Watts teaches that the transmitted print job does not specify a first, original media selection parameter (*see Remarks 3/10/2010 [pages 14 – 16 and 18 – 19]*).

However, Watts does disclose receiving, with a multi-media printer, a print operation transmitted from a print client device comprising a first media selection parameter to be utilized for selecting a first medium to be used for the print operation. The Examiner previously pointed out that Watts suggests that the original media size stored in control language data that identifies an original media size/type associated with the image (*see Office Action 12/10/2009 [pages 7 – 8 and 10]*). Further explanation

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of what Watts explicitly and inherently teaches in view of one skilled in the art is provided.

First, Watts explicitly discloses structure capable of performing transmission of print data from a print client to the multi-media printer over a communication network under normal operation (see *Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35, which is connected to a conventional network [column 3, lines 14 – 17 and column 4, lines 9 – 24]*).

Second, Watts explicitly discloses that the transmitted print operation comprises a first media selection parameter (see *Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies an original media size associated with the stored image [Abstract and column 2, lines 26 – 31], see Figs. 2 – 4 wherein the original media size [i.e. first media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein “letter” size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]*).

Furthermore, Watts expressly teaches that the demonstration page automatically resizes itself to fit a predefined media size of a printing device on which the demonstration page is printed (see *Title, Abstract, Figs. 2 – 4 and 6*). In order to algebraically calculate scaled magnitude when enlarging or shrinking, one skilled in the art would recognize that two variables must be known first: the original size and the scale factor. Here is the well-known equation (1) to one skilled in the art:

$$(1) \text{ Scaled Magnitude} = \text{Original Size} \times \text{Scale Factor}$$

Watts algebraically manipulates the equation above using its two known variables, which are the original size (*see Fig. 4, "letter" media size 105 [see citations above]*) and scaled magnitude (*see Fig. 1, [default] predefined media size 75*), to calculate the appropriate scale factor for the demonstration page (*see Fig. 6 wherein the results of "best fit" scaling steps 340 – 345 according to calculated X and Y Scale Factors [column 2, lines 24 – 31, column 6, lines 46 – 53, column 7, lines 15 – 24 and 43 – 51] are illustratively shown in Figs. 3 – 4 [column 4, lines 44 – 52, column 5, lines 24 – 31 and 41 – 56]*). The well-known equation above has been algebraically manipulated by Watts as follows into equation (2) (*column 6, lines 46 – 53*):

$$(2) \text{ Scale Factor} = \text{Scaled Magnitude} \div \text{Original Size}$$

Therefore, Watts inherently teaches that a first media selection parameter is associated with the print operation because Watts explicitly teaches that the demonstration page automatically resizes itself to fit a predefined media size of a printing device on which the demonstration page is printed.

Third, Watts explicitly discloses the printer for 1) selecting a first medium to be used for the print operation, and 2) whenever a default media selection override parameter is activated, selecting a second medium that is different from the first medium to be used for the print operation.

Watts discloses the first selection scenario in Fig. 2 wherein the original media size 105 associated with the demonstration page data 60, 110 matches the preferred media data 75 (*column 4, lines 46 – 52 and column 5, lines 8 – 11*). Letter size sheet media 105 is the equivalent of a first medium to be used for printing. In other words,

whenever the original media size coincides with the default preferred media size, the demonstration page is printed as is because automatic resizing is unnecessary.

In contrast, Watts discloses the second selection scenario in Figs. 3 – 4 wherein the media sizes 125, 145, which are different than "letter" media size 105 shown in Fig. 2, are chosen whenever the original media size 105 associated with the demonstration page data 60, 110 does not match the preferred data 75 (*column 5, lines 12 – 15, 24 – 31 and 41 – 56*). Media sizes 125, 145 are equivalent to a second medium that is different from the first medium, and the mismatch between original media size 105 and preferred media data 75 is the equivalent to activation of the default media selection override parameter. In other words, whenever resizing of the original media size to the preferred media size is deemed necessary, the second selection of the preferred media size overrides the first selection, which is the original media size.

Therefore, Watts teaches selection or final determination of a medium based upon the operational state of at least one of media selection parameter.

The Applicant's arguments regarding claims 1, 10, 23, 27 and 41 are considered not persuasive. Please cite rationale of the grounds of rejection below for further explanation.

3. Applicant's arguments with respect to the rejections of **claims 30, 32 – 36 and 38 – 40** under 35 U.S.C. §103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Watts et al.** (U.S. Patent No. 6,559,971).

The Applicant argues that the prior art made of record does not disclose, teach or suggest the printer determining whether one or more of the received media selection parameters is operational, and then utilizing a default media selection parameter stored by the printer instead of the received media selection parameter to perform the print operation in the event that one of the received media selection parameters is not operational (*see Remarks 3/10/2010 [pages 17 – 18]*).

However, Watts does disclose the printer determining whether one or more of the received media selections parameters is operational (*see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 46 – 52, column 5, lines 8 – 11 and 49 – 56]*). The Examiner also notes that this observation was previously pointed out to the Applicant (*see Office Action 12/10/2009 [pages 10 – 11]*).

Moreover, Watts discloses the printer then utilizing a default media selection parameter stored by the printer instead of the received media selection parameter to perform the print operation in the event that one of the received media selection parameters is not operational (*see Figs. 2 – 4 wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of*

*demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]).*

The Examiner also notes that these observations were previously pointed out to the Applicant (see *Office Action 12/10/2009 [pages 10 – 11]*).

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. ***Claims 1 – 5, 8, 9 and 23 – 26*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S. Patent No. 6,559,971).

Referring to **claim 1**, Ogura discloses a method of configuring a multi-media printer (see *Fig. 1 illustrates digital copier with a facsimile function [Abstract]*) comprising a print engine processor (see *Fig. 3 illustrates control system of copier comprising image processors and system control [column 6, lines 17 – 27]*) and a print subsystem for printing on a plurality of different media (see *Fig. 1 wherein copier includes cassettes 305 – 307 with an assortment of sized media [Abstract and column 3, lines 9 – 20]*), the method comprising:

using the multi-media printer, receiving a print operation transmitted from a print client device over a communication network, the print operation from the print client device comprising a first media selection parameter to be utilized for selecting a first medium to be used for the print operation (see *Fig. 10 [column 14, lines 47 – 68 and*



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*column 15, lines 12 – 19] and see Figs. 18a – 18b [column 3, lines 1 – 20, column 16, lines 36 – 39 and column 17, lines 7 – 28]) but does not explicitly disclose the method further comprising automatically utilizing default media selection parameters for the print operation if a default media selection override parameter associated with the printer is activated, wherein the default media selection override parameter is programmable and is to be utilized for selecting a second medium that is different than the first medium to be used for the print operation.*

Watts discloses a method of configuring a multi-media printer (see *Figs. 1 – 4 wherein printer 10 processes and prints demonstration page data 60 on variably sized media [Abstract, column 2, line 65 – column 3, line 2 and column 4, lines 44 – 46]) comprising a print engine processor (see Fig. 1, print engine controller 25), the method comprising:*

*using the multi-media printer, receiving a print operation transmitted from a print client device over a communication network (see Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35 over a conventional network for printing as output page 45 [column 4, lines 9 – 24]), the print operation from the print client device comprising a first media selection parameter (see Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies **an original media size associated with the stored image** [Abstract and column 2, lines 26 – 31], see Figs. 2 – 4 wherein the original media size [i.e. first media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein “letter” size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]) to be*

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utilized for selecting a first medium to be used for the print operation (see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 46 – 52, column 5, lines 8 – 11 and 49 – 56]), and

automatically utilizing default media selection parameters for the print operation (see Figs. 2 – 4 and 6 wherein PostScript commands are interpreted and scale factors are calculated in step 340 and then the image is scaled to fit [default] preferred media size for printing in step 345 [Abstract, column 5, lines 49 – 56 and column 7, lines 46 – 51]) if a default media selection override parameter associated with the printer is activated (see Fig. 1 wherein preferred media size 75 is equivalent to a default media selection override parameter associated with the printer [column 3, line 62 – column 4, line 4]), wherein the default media selection override parameter is programmable (see Fig. 1 wherein preferred media size 75 is either user-programmable or NVRAM 70 reads the override parameter from ROM 65 upon initialization in step 320 [column 3, line 65 – column 4, line 4 and column 7, lines 27 – 36]) and is to be utilized for selecting a second medium that is different than the first medium to be used for the print operation (see Figs. 2 – 4 wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5,

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*lines 49 – 56] and see Fig. 6 wherein [default] predefined media size 75 is substituted [read into] the demonstration page print job in step 335 [column 7, lines 43 – 46]).*

There is applicable rationale for prima facie obviousness.

6. Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.

In combination, Ogura performs the same function as it does separately of transmitting a media selection parameter to be utilized for selecting a first medium to be used for a print operation to a multi-media printer, which comprises a plurality of different media for printing. Watts performs the same function as it does separately of automatically utilizing default media selection parameters for printing if a default media selection override parameter is activated.

Therefore, one of ordinary skill in the art could have combined the elements as claimed by known techniques, and that in combination, each element merely performs the same function as it does separately.

The results of the combination would have been predictable whereby Ogura is modified to automatically utilize default media selection parameters for printing if a default media selection override parameter is activated, as taught by Watts. The combination is advantageous because the printed page is automatically resized to fit a

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preferred media size for the printer, as suggested by Watts (*Abstract and column 2, lines 10 – 31*)).

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See MPEP §2143 A and G.

Referring to **claims 2 – 4**, Watts discloses the method further wherein the overriding default media selection override parameter is programmable via the print client device, via an operation panel of the multi-media printer (*see Fig. 1, control panel 80, host 37 [column 1, lines 24 – 29, column 3, lines 65 – 67 and column 7, lines 31 – 34]*) or via a presence of a configuration memory by the multi-media printer (*see Fig. 1, NVRAM 70 comprising preferred media size 75*).

Referring to **claim 5**, Watts discloses the method further wherein the default media selection parameters are a single default set of settings applied to all print operations (*see Fig. 5 wherein a single demonstration page data 60 automatically resizes itself to best-fit any given [default] preferred media size 75 associated with printer 10 [column 2, lines 10 – 13]*).

Referring to **claim 8**, Watts discloses the method further wherein the default media selection parameters include default settings selected based on a size of a source image as specified in the print operation (*see Figs. 2 – 4 wherein one mode does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the [default] preferred media size [column 5, lines 8 – 15]*

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*whereas another mode resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]).*

Referring to **claim 9**, Watts discloses the method further wherein the default media selection parameters are selected based on a modality of the print operation (see *Figs. 2 – 4 wherein one mode does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the [default] preferred media size [column 5, lines 8 – 15] whereas another mode resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]).*

Referring to **claims 23 – 26**, the rationale provided above in rejections of claims 1 – 4, respectively, are incorporated herein. The methods of claims 1 – 4 are stored as programs of instructions of claims 23 – 26, respectively, within memory and executed by one or more processors (see *Ogura [see Fig. 3 illustrates control system of copier comprising image processors and system control [column 6, lines 17 – 27]] and see Watts [see Fig. 1, microprocessor 15, ROM 65, RAM 40, NVRAM 70 [column 3, lines 2 – 4 and column 3, line 16 – column 4, line 4]]*). Furthermore, Watts discloses memory as a non-volatile, machine-readable storage medium storing machine-readable program code (see *Fig. 1, NVRAM 70*).

7. **Claims 10 – 12, 15, 16, 27 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S. Patent No. 6,559,971) and further in view of **Tuchtenhagen** (U.S. Patent Application Publication No. 2003/0160979).

Referring to **claim 10**, Ogura discloses a method of configuring a multi-media printer (*see Fig. 1 illustrates digital copier with a facsimile function [Abstract]*) comprising a print engine processor (*see Fig. 3 illustrates control system of copier comprising image processors and system control [column 6, lines 17 – 27]*) and a print subsystem for printing on a plurality of different media (*see Fig. 1 wherein copier includes cassettes 305 – 307 with an assortment of sized media [Abstract and column 3, lines 9 – 20]*), the method comprising:

using the multi-media printer, receiving a print operation from a print client device, the print operation comprising print job data defining content to be printed during the print operation and media selection defining a first media size on which the content is to be printed,

in response to receiving the print operation from the print client device, determining if the media selection parameters received from the print client device, including the first media size, indicated in the print operation are operational (*see Fig. 10 [column 14, lines 47 – 68 and column 15, lines 12 – 19] and see Figs. 18a – 18b [column 3, lines 1 – 20, column 16, lines 36 – 39 and column 17, lines 7 – 28]*) but does not explicitly disclose the method further comprising utilizing a default media selection parameter selected from a plurality of potential media selection parameters stored on a

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computer-readable medium for the print operation if one of the media selection parameters included in the print operation is not operational, wherein the default media selection parameter is programmable.

Watts discloses a method of configuring a multi-media printer (*see Figs. 1 – 4 wherein printer 10 processes and prints demonstration page data 60 on variably sized media [Abstract, column 2, line 65 – column 3, line 2 and column 4, lines 44 – 46]*) comprising a print engine processor (*see Fig. 1, print engine controller 25*), comprising:

using the multi-media printer, receiving a print operation from a print client device (*see Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35 over a conventional network for printing as output page 45 [column 4, lines 9 – 24]*), the print operation comprising print job data defining content to be printed during the print operation and media selection defining a first media size on which the content is to be printed (*see Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies **an original media size associated with the stored image** [Abstract and column 2, lines 26 – 31], *see Figs. 2 – 4 wherein the original media size [i.e. first media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein “letter” size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]*).*

in response to receiving the print operation from the print client device, determining if media selection parameters received from the print client device, including the first media type and the first media size, indicated in the print operation are operational (*see Figs. 1 and 5 wherein demonstration page data 60 includes control*

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*language 210 that identifies an original media size/type [e.g. letter, A4, legal, etc.] associated with the stored image 205 [Abstract, column 2, lines 26 – 31, column 3, lines 37 – 39 and 50 – 56] and see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 37 – 46 and column 5, lines 8 – 15]), and*

*utilizing a default media selection parameter of potential media selection parameters for the print operation (see Figs. 2 – 4 and 6 wherein PostScript commands are interpreted and scale factors are calculated in step 340 and then the image is scaled to fit [operational] preferred media size for printing in step 345 [Abstract, column 5, lines 49 – 56 and column 7, lines 46 – 51]) if one of the media selection parameters included in the print operation is not operational (see Figs. 2 – 4 wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]), wherein the default media selection parameter is programmable (see Fig. 1 wherein preferred media size 75 is either user-programmable or NVRAM 70 reads the override parameter from ROM 65 upon initialization in step 320 [column 3, line 65 – column 4, line 4 and column 7, lines 27 – 36]) but does not explicitly disclose the method further wherein the utilized default media selection parameter is*



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selected from a plurality of potential media selection parameters stored on a computer-readable medium for the print operation.

Tuchtenhagen discloses the method of configuring a multi-media printer (see *Figs. 1 – 5 wherein imaging apparatus 100 comprises multiple trays 108, 116 for different types of media [Abstract, paragraphs 0024 – 0029, 0031 and 0035]*), comprising:

using the multi-media printer, receiving a print operation from a print client (see *Figs. 1 and 9 – 10 wherein printer 100 receives print job 238 from user stations 20, 22 in step 302 [paragraphs 0024, 0034 and 0052 – 0053]*), the print operation comprising print job data (see *Fig. 9, print job 238*) defining content to be printed during the print operation (see *Fig. 9, image contents portion 240*) and media selection parameters defining a first media type and a first media size on which the content to be printed (see *Fig. 9 wherein file printing routine 216 generates media type information 236, which specifies media size or type and location, based upon media type designation 214 [paragraphs 0040 – 0041] and wherein see Figs. 9 – 10 wherein processor 177 either uses the designated media of the received print job 238 in step 308 or actuates the priority media tray based upon the received media location portion 242 [paragraphs 0043 – 0045 and 0053]*), and

selecting and utilizing default media selection parameter from a plurality of potential media selection parameters stored on a computer-readable medium for the print operation (see *Fig. 9 wherein software system 200 allows the user to select one of several default media types for the media type designation 214 [paragraphs 0040 –*

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*0041] and see Figs. 2 – 5 wherein imaging apparatus 100 includes processor 117, memory device 119 and user interface 122 [paragraphs 0025, 0030 and 0039]).*

There are applicable rationales for prima facie obviousness.

8. Tuchtenhagen is a similar or analogous system to the claimed invention in that Tuchtenhagen teaches configuration of a multi-media printer for printing. The design incentive of providing a pull down menu of potential default media sources for the user to choose from would have prompted a predictable variation of Watts by applying the known principle as taught by Tuchtenhagen of selecting a default media selection parameter from a plurality of potential media selection parameters stored on a computer-readable medium for the print operation from the printer.

In view of the design incentives to provide a pull down menu of potential default media sources for the user selection would have implemented the claimed variation of the prior art method of Watts. Although Watts discloses a computer-readable medium storing a default media selection parameter programmable by a user at the printer (see *Fig. 1 wherein a user may enter another default media size value 75 using control panel 80 [column 7, lines 31 – 34]*), the variation taught by Tuchtenhagen's software system that allows the user to select a default media parameter from a menu of multiple pre-stored media parameters could reasonably have been programmed into Watts' NVRAM and made selectable by Watts' control panel at the printer. Thus, the claimed variation would have been predictable by one of ordinary skill in the art.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See MPEP §2143 F.

9. Watts contains a “base” process of configuring a multi-media printer by determining whether the received media selection parameter is operational or not and by selecting a user-programmable default media selection parameter for printing when the determination is not operational, which the claimed invention can be seen as an “improvement” in that selecting a default media selection parameter from a plurality of potential media selection parameters stored on a computer-readable medium for the print operation.

Tuchtenhagen contains a “comparable” process of selecting a default media selection parameter from a plurality of potential media selection parameters stored on a computer-readable medium for the print operation that has been improved in the same way as the claimed invention.

The known “improvement” taught by Tuchtenhagen could have been applied in the same way to the “base” process taught by Watts, and the results would have been predictable. The application of the known “improvement” to the “base” device would have resulted in the printer’s user interface allowing the user to choose from multiple default media sources.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See MPEP §2143 C.

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10. Moreover, duplication of user-selectable options via a menu (e.g. printer control panel), as taught by Tuchtenhagen, is an obvious variation of Watts unless a new and unexpected result is produced. Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See 2144.04 VI C.

Referring to **claim 11**, Watts discloses the method further including combining an operational media selection parameter with the default media selection parameter and determining if the combining of the operational media selection parameter with the default media selection parameter is supported (*see Figs. 1 and 5 wherein demonstration page data 60 includes control language 210 that identifies an original media size/type [e.g. letter, A4, legal, etc.] associated with the stored image 205 [Abstract, column 2, lines 26 – 31, column 3, lines 37 – 39 and 50 – 56] and see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 37 – 46 and column 5, lines 8 – 15]*).

Referring to **claim 12**, Watts discloses the method further wherein the potential default media selection parameters are a single default set of settings applied to all print operations (*see Fig. 5 wherein a single demonstration page data 60 automatically resizes itself to best-fit any given [default] preferred media size 75 associated with printer 10 [column 2, lines 10 – 13]*).

Referring to **claim 15**, Watts discloses the method further wherein the potential default media selection parameters include default settings selected based on a size of a source image as specified in the print operation (see *Figs. 2 – 4 wherein one mode does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the [default] preferred media size [column 5, lines 8 – 15] whereas another mode resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]*).

Referring to **claim 16**, Watts discloses the method further wherein the potential default media selection parameters are selected based on a modality of the print operation (see *Figs. 2 – 4 wherein one mode does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the [default] preferred media size [column 5, lines 8 – 15] whereas another mode resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]*).

Referring to **claims 27 and 28**, the rationale provided above in rejections of claims 10 and 11, respectively, are incorporated herein. The methods of claims 10 and 11 are stored as programs of instructions of claims 27 and 28, respectively, within memory and executed by one or more processors (see *Ogura [see Fig. 3 illustrates control system of copier comprising image processors and system control [column 6, lines 17 – 27]]*, see *Watts [see Fig. 1, microprocessor 15, ROM 65, RAM 40, NVRAM 70*

*[column 3, lines 2 – 4 and column 3, line 16 – column 4, line 4]] and see Tuchtenhagen [see Fig. 3, processor 117, memory 119 and see Fig. 9, software system 200]].*

11. **Claims 6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S. Patent No. 6,559,971) and further in view of **Simpson et al.** (U.S. Pre-Grant Publication No. 2003/0011801).

Referring to **claim 6**, Ogura in view of Watts disclose the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the default media selection parameters include a set of grayscale default settings and a set of color default settings.

Simpson discloses the method wherein the default media selection parameters (see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives) include a set of grayscale default settings and a set of color default settings (paragraph 0043 wherein monochrome is analogous to a grayscale setting).

Referring to **claim 7**, Ogura in view of Watts disclose the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further

wherein the default media selection parameters include default settings based on a number of images printed on a single sheet as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives) include default settings based on a number of images printed on a single sheet as specified in the print operation (see Fig. 3 wherein, for example, selector 248 changes the copy count to 2 whenever the document name ends with "JPG and the length set is one page because at least 50% of the time, according to the user print history 252, the user requests two copies of a document one page in length and ending in "JPG" [paragraph 0047]).

There are applicable rationales for prima facie obviousness.

12. Watts and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to

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configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*). See MPEP §2143 G.

13. **Claims 13 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Tuchtenhagen** (U.S. Patent Application Publication No. 2003/0160979) and further in view of **Simpson et al.** (U.S. Pre-Grant Publication No. 2003/0011801).

Referring to **claim 13**, Ogura and Watts in view of Tuchtenhagen disclose the method as discussed above in the rejection claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include a set of grayscale default settings and a set of color default settings.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*)



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include a set of grayscale default settings and a set of color default settings (*paragraph 0043 wherein monochrome is analogous to a grayscale setting*).

Referring to **claim 7**, Ogura and Watts in view of Tuchtenhagen disclose the method as discussed above in the rejection claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include default settings based on a number of images printed on a single sheet as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include default settings based on a number of images printed on a single sheet as specified in the print operation (*see Fig. 3 wherein, for example, selector 248 changes the copy count to 2 whenever the document name ends with "JPG and the length set is one page because at least 50% of the time, according to the user print history 252, the user requests two copies of a document one page in length and ending in "JPG" [paragraph 0047]*).

There are applicable rationales for prima facie obviousness.

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14. Watts and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*). See MPEP §2143 G.

15. **Claims 30, 32 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Simpson et al.** (U.S. Pre-Grant Publication No. 2003/0011801) and further in view of **Yacoub** (U.S. Patent No. 6,552,813).

Referring to **claim 30**, Watts discloses a multi-media printer (*see Figs. 1 – 4 wherein printer 10 processes and prints demonstration page data 60 on variably sized media [Abstract, column 2, line 65 – column 3, line 2 and column 4, lines 44 – 46]*), comprising:

a print engine processor (*see Fig. 1, print engine controller 25*),

a print subsystem for printing an output (*see Fig. 1, print engine 30, output page 45*),

a decoding module to receive print job parameters and print job data for a print job at the multi-media printer (see Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35 over a conventional network for printing as output page 45 [column 4, lines 9 – 24]), to decode the print job parameters and the print job data to create decoded print job parameters including decoded print job media selection parameters and decoded print job data, and to output the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (see Fig. 1 wherein ROM 65 includes language parser for parsing the identified printer language to enable the particular job at hand to be executed and printed [column 3, lines 24 – 48] and see Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies **an original media size associated with the stored image** [Abstract and column 2, lines 26 – 31], see Figs. 2 – 4 wherein the original media size [i.e. decoded print media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein “letter” size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]),

a configuration memory to store default configuration parameter (see Fig. 1 wherein preferred media size 75 [i.e. default configuration parameter] is either user-programmable or NVRAM 70 reads the override parameter from ROM 65 upon initialization in step 320 [column 3, line 65 – column 4, line 4 and column 7, lines 27 – 36]), and

a parameter determination module to receive the decoded print job parameters including the decoded print job media selection parameters and the decoded print job

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data (see Fig. 6, step 305 [column 7, lines 12 – 13]), to receive the default configuration parameter including default media selection parameter from the configuration memory (see Fig. 6 wherein preferred media size 75 is entered into NVRAM 70 or read from ROM 65 into NVRAM 70 in step 320 [column 7, lines 27 – 36]), and to determine final print job media selection parameters for the print job based on an operational state of at least one of the decoded print job media selection parameters and the decoded print job data (see Figs. 1 and 5 wherein demonstration page data 60 includes control language 210 that identifies an original media size/type [e.g. letter, A4, legal, etc.] associated with the stored image 205 [Abstract, column 2, lines 26 – 31, column 3, lines 37 – 39 and 50 – 56] and see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 37 – 46 and column 5, lines 8 – 15]), utilizing the decoded print job media selection parameters and the default media selection parameter (see Figs. 2 – 4 and 6 wherein PostScript commands are interpreted and scale factors are calculated in step 340 and then the image is scaled to fit [operational] preferred media size for printing in step 345 [Abstract, column 5, lines 49 – 56 and column 7, lines 46 – 51]) but does not disclose the printer further wherein there are a plurality of default media selection parameters stored by the configuration memory, and wherein the default media selection parameters comprise parameters for identifying a default media to be used for performing a print operation with each of a plurality of different printing technologies.

Simpson discloses a printer (see Fig. 1, imaging destination 106 [paragraph 0024], see Fig. 2, printer 174 [paragraph 0032] and see Fig. 3, printer 224 [paragraphs 0036 – 0037]), comprising:

a print subsystem for printing an output (see Figs 1 – 3 wherein print options serve to configure the printer in a particular manner of printing such that each option affects how the printer will print documents it receives, and/or how it will pre-process (or post-process) the document to be printed [paragraph 0021]),

a decoding module (see Fig. 3 wherein printer 224 includes auto-select module 246 to automatically select a print option configuration for a particular print request based upon characteristics of the print request [paragraph 0041]) to receive print job parameters and print job data for a print job at the printer (see Fig. 10 wherein a user request to print is received in act 542 and then print options are then communicated (if necessary) to the printer in act 544 [paragraphs 0065 and 0069 – 0070] and see Fig. 11 wherein the printer receives the print request in act 562 [paragraphs 0071 – 0072]), to decode the print job parameters and the print job data to create decoded print job parameters including decoded print job media selection parameters and decoded print job data (see Fig. 11 wherein at least one print request characteristic [e.g. media type/size] is identified in act 564 and then print options are selected based upon the identified print request characteristics in act 566 [paragraphs 0021, 0071 – 0072]), and to output the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (see Fig. 11, act 572 [paragraphs 0071 – 0072]),

a configuration memory to store default configuration parameters (see Fig. 3 wherein selector 248, which is stored locally on printer 224, may select pre-existing configurations [e.g. pre-programmed, default values] based upon print options settings 240, rules 250 and/or user print history 252, which are also stored locally on printer 224 [paragraphs 0039 and 0041 – 0047] and see Fig. 8 wherein portion 446 displays print options associated with the currently selected print option configuration from menu 444 [e.g. Photograph], thereby presenting the user an indication of exactly which print options will be used when printing and allowing the user to override any of those print options [paragraph 0063]), and

a parameter determination module (see Fig. 3, auto-select module 246) to receive the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (see Fig. 11, acts 564, 566), to receive the default configuration parameters including default media selection parameters from the configuration memory (see Fig. 11, acts 566, 568), and to determine final print job media selection parameters for the print job (see Fig. 11 wherein the user is presented with saved print options for overriding the identified characteristics from the received print request in act 568 [paragraphs 0007, 0046, 0047 and 0071 – 0072]), utilizing the decoded print job media selection parameters and the default media selection parameters (see Fig. 11, acts 570, 572) but does not explicitly disclose the printer further wherein the default media selection parameters stored by the configuration memory comprise parameters for identifying media selection parameters

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to be used for performing a print operation with each of a plurality of different printing technologies.

Yacoub discloses the printer wherein the default media selection parameters stored by the configuration memory (*see Fig. 2 wherein the user chooses default print preferences, such as paper type and paper size [i.e. media selection parameter], when sending print job in step 200 [column 4, lines 5 – 10, 24 – 27, column 5, lines 7 – 13 and column 8, line 62 – column 9, line 6]*) comprise parameters for identifying default media to be used for performing a print operation with each of a plurality of different printing technologies (*see Figs. 2 and 4 wherein virtual printer automatically finds and selects the appropriate printer, such as one of inkjet printer 414 versus one of laser printers 410, 412, 416 [i.e. differing printing technologies], based upon selected paper type selections [e.g. transparencies, labels, envelopes, etc.] [column 2, lines 8 – 21, column 7, lines 46 – 48, column 7, line 53 – column 8, line 17, column 8, line 62 – column 9, line 6 and column 10, lines 14 – 27]*).

There are applicable rationales for prima facie obviousness.

16. Watts, Simpson and Yacoub are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print

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options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*). See MPEP §2143 G.

17. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to correlate each of a certain type of print media by default to a particular printing technology, such as inkjet printing versus laser printing. The suggestion/motivation for doing so would have been to prevent undesirable printing outcomes (*column 8, lines 8 – 12 and column 10, lines 14 – 27*) by automatically providing default print media settings, which improve user operability and save time, that best match the user's print job preferences with most suitable printing technology (*column 1, lines 51 – 55, 62 – 66, column 2, lines 5 – 7, column 3, lines 27 – 40, column 4, lines 24 – 27, 53 – 55 and column 5, lines 7 – 13*), as suggested by Yacoub. See MPEP §2143 G.

18. Moreover, under the broadest reasonable interpretation of the claim consistent with one skilled in the art, the Examiner contends that the multi-printer printer neither explicitly nor implicitly claims that the multi-printer comprises structure “for performing a print operation with each of the plurality of different printing technologies.” That is, the relationship among each of the stored media selection parameters and its respective printing technology is merely a recited data structure correlating distinct sets of data (e.g. look-up table). The medical imaging system of claim 36 differs from the multi-



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media printer of claim 30 because the system of claim 36 expressly recites structure, which is "a multi-media printer that utilizes at least two printing technologies," whereas the printer of claim 30 merely identifies data. The identification of said data in claim 30 does not positively result in the multi-media performing a print operation with each of a plurality of different printing technologies. In order for that identified print operation to be realized, the multi-media printer would need structure that performs said different printing technologies for that identified print operation.

If the multi-media printer of claim 30 was hypothetically amended to include structure to perform different printing technologies, the Examiner would be inclined to reject the claims based upon the prior art applied in the rejection of claim 36, which expressly includes such structure, using a similar rationale for rejection. Rather than choosing among distinctly separate printing units in a network as taught in the base system of Yacoub, the teachings of Oakeson could have modified the base system by combining the inkjet and laser technologies into one composite printer to better accommodate various print media. Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. Please see the rationale provided below for further explanation.

Referring to **claim 32**, Watts discloses the printer further wherein the parameter determination module identifies that the decoded print job media selection parameters are not operational to establish media selection parameters and the default media selection parameters are selected as the final media selection parameters for the print

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job (see Figs. 2 – 4 wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]).

Referring to **claim 35**, Watts discloses the printer further wherein the configuration memory is a non-volatile memory (see Fig. 1, NVRAM 70).

19. **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Simpson et al.** (U.S. Pre-Grant Publication No. 2003/0011801) in view of **Yacoub** (U.S. Patent No. 6,552,813) and further in view of **Sesek** (U.S. Patent No. 7,151,611).

Referring to **claim 31**, Watts and Simpson in view of Yacoub disclose the apparatus as discussed above in the rejection of claim 30 but does not explicitly disclose the apparatus further wherein an always use default setting is established and the parameter determination module selects the default media selection parameters as the final media selection parameters.

Sesek discloses the apparatus wherein an always use default setting is established and the parameter determination module selects the default media selection parameters as the final media selection parameters (see Fig. 3 wherein the “always

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*use" default option when either the user chooses not to activate the Printer Options Retention Enable button 86 and always print using default values in steps 90 – 91 [column 2, lines 51 – 57, column 4, lines 11 – 15 and 34 – 36] or when the retention time period has expired and printer properties revert to always use their default values indefinitely hereinafter in steps 92, 98 – 99 [column 1, lines 7 – 11, column 2, lines 54 – 57, column 4, lines 7 – 11 and 45 – 48]).*

There are applicable rationales for prima facie obviousness.

20. Watts, Simpson, Yacoub and Seseek are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing the user to toggle between always using default print settings or when to override those default values. The suggestion/motivation for doing so would have been to conveniently give the user discretion over when to always use conventional default settings and when to revert to those same conventional default settings after a temporary time period always hereinafter, as suggested by Seseek (*column 1, lines 7 – 11, column 2, lines 30 – 44, 51 – 57 and column 4, line 66 – column 5, line 3*). See MPEP §2143 G.

21. **Claims 36, 38 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Ozaki** (U.S.

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Patent No. 6,912,061) and further in view of **Oakeson et al.** (U.S. Patent No. 6,618,563).

Referring to **claim 36**, Watts discloses a system, comprising:

a computing device (*see Fig. 1, host computer 37*) to transmit print jobs including print job parameters and print job data,

a multi-media printer (*see Figs. 1 – 4 wherein printer 10 processes and prints demonstration page data 60 on variably sized media [Abstract, column 2, line 65 – column 3, line 2 and column 4, lines 44 – 46]*) to receive print jobs from the computing device (*see Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35 over a conventional network for printing as output page 45 [column 4, lines 9 – 24]*) and to create an image from the print job data according to the print job parameters (*see Fig. 1 wherein microprocessor 15 executes routines [e.g. language selection, language parser, page converter, rasterizer, compression, page print scheduler, print engine manager] stored in ROM 65 [column 3, lines 24 – 48]*), wherein the multi-media printer includes:

a print engine processor (*see Fig. 1, print engine controller 25*),

a print subsystem for printing the image defined by the print job data (*see Fig. 1, print engine 30, output page 45*),

a decoding module to receive print job parameters including print job media selection parameters (*see Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies **an original media size associated with the stored image** [Abstract and column 2, lines 26 – 31], see Figs. 2 – 4 wherein the original media*

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*size [i.e. print job media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein "letter" size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]) and print job data for a print job at the multi-media printer (see Fig. 1 wherein an external device, such as host 37, can send demonstration page data 60 to printer 10 via I/O port 35 over a conventional network for printing as output page 45 [column 4, lines 9 – 24]), to decode the print job parameters and the print job data to create decoded print job parameters including decoded print job media selection parameters and decoded print job data, and to output the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (see Fig. 1 wherein ROM 65 includes language parser for parsing the identified printer language to enable the particular job at hand to be executed and printed [column 3, lines 24 – 48] and see Figs. 1 and 5 wherein demonstration page 60 includes control language that identifies **an original media size associated with the stored image** [Abstract and column 2, lines 26 – 31], see Figs. 2 – 4 wherein the original media size [i.e. decoded print media selection parameter] of demonstration page 60 is represented as media size 105 [e.g. wherein "letter" size is used for illustrative purposes] [column 5, lines 8 – 15 and 49 – 56]),*

*a configuration memory to store default configuration parameter (see Fig. 1 wherein preferred media size 75 [i.e. default configuration parameter] is either user-programmable or NVRAM 70 reads the override parameter from ROM 65 upon initialization in step 320 [column 3, line 65 – column 4, line 4 and column 7, lines 27 – 36]), and*

a parameter determination module to receive the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (see Fig. 6, step 305 [column 7, lines 12 – 13]), to receive the default configuration parameter including default media selection parameter from the configuration memory (see Fig. 6 wherein preferred media size 75 is entered into NVRAM 70 or read from ROM 65 into NVRAM 70 in step 320 [column 7, lines 27 – 36]), and to determine final print job media selection parameters for the print job based on an operational state of at least one of the decoded print job media selection parameters and the decoded print job data (see Figs. 1 and 5 wherein demonstration page data 60 includes control language 210 that identifies an original media size/type [e.g. letter, A4, legal, etc.] associated with the stored image 205 [Abstract, column 2, lines 26 – 31, column 3, lines 37 – 39 and 50 – 56] and see Figs. 2 – 4 wherein original media size/type embedded in control section 210 is compared with [default] preferred media data 75 in order to determine if print operation is operational [column 4, lines 37 – 46 and column 5, lines 8 – 15]), utilizing at least one of the decoded print job media selection parameters and at least one of the default media selection parameter in place of another one of the decoded print job media selection parameters (see Figs. 2 – 4 and 6 wherein PostScript commands are interpreted and scale factors are calculated in step 340 and then the image is scaled to fit [operational] preferred media size for printing in step 345 [Abstract, column 5, lines 49 – 56 and column 7, lines 46 – 51] and wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas

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*another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]) but does not explicitly disclose the system further comprising a plurality of computing devices to transmit print jobs including print job parameters and print job data, a plurality of medical imaging devices to transmit print jobs including print job parameters and print job data, and a multi-media printer that utilizes at least two printing technologies to receive the print jobs from either the plurality of computing devices or the plurality of medical imaging devices and to create an image from the print job data according to the print job parameters.*

Ozaki discloses the multi-media printer (*see Fig. 1, printers 201, 202 [column 5, line 61 – column 6, line 15]*) included within a medical imaging system (*see Fig. 1, network system 100 [Abstract and column 5, lines 27– 42]*), wherein the system comprising:

a plurality of computing devices (*see Fig. 1, workstations 10A, 10B*) to transmit print jobs including print job parameters and print job data (*column 6, lines 41 – 50 wherein it is well-known in the art that workstations 10A, 10B submit print jobs via a network [e.g. LAN, WAN] to printers 201, 202*),

a plurality of medical imaging devices (*see Fig. 1, medical modalities 50A – 50F*) to transmit print jobs including print job parameters and print job data (*column 5, lines 49 – 54*), and

the multi-media printer to receive the print jobs from either the plurality of computing devices or the plurality of medical imaging devices and to create an image from the print job data according to the print job parameters (*column 5, line 61 – column 6, line 40*) but does not explicitly disclose the multi-media printer that utilizes at least two printing technologies.

Oakeson discloses the multi-media printer that utilizes at least two printing technologies (*see Fig. 1 wherein printer 100 comprises laser printing assembly 103 and inkjet head assembly 106 [Abstract, column 1, lines 37 – 48 and column 2, lines 61 – 63]*).

There are applicable rationales for prima facie obviousness.

22. Watts and Ozaki are combinable because they are from the same field of endeavor, being networked printing systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art to connect several different medical imaging devices to a multi-media printer. The suggestion/motivation for doing so would have been to print acquired images from medical imaging devices at various sizes, as suggested by Ozaki (*column 1, lines 17 – 25 and column 6, lines 1 – 15*). See MPEP §2143 G.

23. Watts and Oakeson are combinable because they are from the same field of endeavor, being printing on various print media. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include printing with at least two



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different printing technologies. The suggestion/motivation for doing so would have been to optimize printing on various print media, as suggested by Oakeson (*column 1, lines 20 – 33 and column 2, lines 1 – 12*). See MPEP §2143 G.

24. Watts contains a "base" system comprising a multi-media printer for determining the final print job media selection parameters for the print job utilizing the decoded default parameter in place of another decoded print job parameter, which the claimed invention can be seen as an "improvement" in that a multi-media printer utilizes at least two printing technologies.

Oakeson contains a known technique of attaching an inkjet head assembly to the printer structure that is applicable to the "base" system, which incorporates at least two printing technologies within a multi-media printer.

The known technique taught by Oakeson for using a multi-media printer with at least two printing technologies would have been recognized by one skilled in the art as applicable to the "base" system taught by Watts, and the results of that application would have been predictable. The result of optimized printing on various print media results in an improved process. Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See MPEP §2143 D.

Referring to **claim 38**, Watts discloses the system further wherein the parameter determination module identifies that the decoded print job media selection parameters

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are not operational to select media type or media size, and the final print job media selection parameters for the print job are the default media selection parameters. (see *Figs. 2 – 4 wherein one mode [e.g. operational mode] does not resize image 110 of media size 105 if the original size of demonstration page data 60 corresponds with the default preferred media size [column 5, lines 8 – 15] whereas another mode [e.g. non-operational mode] resizes image 110 to one of images 130, 150 to fit respectively different media sizes 135, 155 if the original size of demonstration page data 60 does not correspond with the [default] preferred media size [column 5, lines 49 – 56]*).

Referring to **claim 40**, Watts discloses the system further wherein the configuration memory is a non-volatile memory (see *Fig. 1, NVRAM 70*).

25. **Claim 37** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Ozaki** (U.S. Patent No. 6,912,061) in view of **Oakeson et al.** (U.S. Patent No. 6,618,563) and further in view of **Sesek** (U.S. Patent No. 7,151,611).

Referring to **claim 31**, Watts and Ozaki in view of Oakeson disclose the apparatus as discussed above in the rejection of claim 30 but does not explicitly disclose the apparatus further wherein an always use default setting is established and the parameter determination module selects the default media selection parameters as the final media selection parameters.

Sesek discloses the apparatus wherein an always use default setting is established and the parameter determination module selects the default media selection

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parameters as the final media selection parameters (see Fig. 3 wherein the “always use” default option when either the user chooses not to activate the Printer Options Retention Enable button 86 and always print using default values in steps 90 – 91 [column 2, lines 51 – 57, column 4, lines 11 – 15 and 34 – 36] or when the retention time period has expired and printer properties revert to always use their default values indefinitely hereinafter in steps 92, 98 – 99 [column 1, lines 7 – 11, column 2, lines 54 – 57, column 4, lines 7 – 11 and 45 – 48]).

There are applicable rationales for prima facie obviousness.

26. Watts and Sesek are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing the user to toggle between always using default print settings or when to override those default values. The suggestion/motivation for doing so would have been to conveniently give the user discretion over when to always use conventional default settings and when to revert to those same conventional default settings after a temporary time period always hereinafter, as suggested by Sesek (column 1, lines 7 – 11, column 2, lines 30 – 44, 51 – 57 and column 4, line 66 – column 5, line 3). See MPEP §2143 G.

27. **Claims 41 – 45 and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S.

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Patent No. 6,559,971) and further in view of **Oakeson et al.** (U.S. Patent No. 6,618,563).

Referring to **claim 41**, the rationale provided above in the rejection of claim 1 is incorporated herein. Ogura and Watts disclose the method of configuring a multi-media printer as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the multi-media printer utilizes two printing technologies.

Oakeson discloses the method further wherein the multi-media printer utilizes two printing technologies (*see Fig. 1 wherein printer 100 comprises laser printing assembly 103 and inkjet head assembly 106 [Abstract, column 1, lines 37 – 48 and column 2, lines 61 – 63]*).

There are applicable rationales for prima facie obviousness.

28. Watts and Oakeson are combinable because they are from the same field of endeavor, being printing on various print media. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include printing with at least two different printing technologies. The suggestion/motivation for doing so would have been to optimize printing on various print media, as suggested by Oakeson (*column 1, lines 20 – 33 and column 2, lines 1 – 12*). See MPEP §2143 G.

29. Ogura in view Watts contain a “base” process of configuring a multi-media printer  
Oakeson contains a known technique of utilizing two printing technologies within the same printer that is applicable to the “base” process.

The known technique taught by Oakeson of utilizing two printing technologies within the same printer would have been recognized by one skilled in the art as applicable to the "base" process as taught by Ogura in view of Watts. One of ordinary skill in the art would have recognized that applying the Oakeson's known technique of attaching an inkjet head assembly to the printer structure would have yielded predictable results and resulted in an improved system wherein Watts teaches that printers may comprise laser printers as well as ink jet printers.

Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made. See MPEP §2143 D.

Referring to **claims 42 – 45 and 48**, the rationale provided above in the rejections of claims 2 – 5 and 8, respectively, are incorporated herein. In addition, the methods of claims 2 – 5 and 8 include the elements and limitations of the methods of claims 42 – 45 and 48, respectively.

30. **Claims 46 and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogura** (U.S. Patent No. 5,019,916) in view of **Watts et al.** (U.S. Patent No. 6,559,971) in view of **Oakeson et al.** (U.S. Patent No. 6,618,563) and further in view of **Simpson et al.** (U.S. Pre-Grant Publication No. 2003/0011801).

Referring to **claim 46**, Ogura and Watts in view of Oakeson disclose the method as discussed above in the rejection of claim 41 but does not explicitly disclose the

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method further wherein the default media selection parameters include a set of grayscale default settings and a set of color default settings.

Simpson discloses the method wherein the default media selection parameters (see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives) include a set of grayscale default settings and a set of color default settings (paragraph 0043 wherein monochrome is analogous to a grayscale setting).

Referring to **claim 47**, Ogura and Watts and Oakeson disclose the method as discussed above in the rejections of claim 41 but does not explicitly disclose the method further wherein the default media selection parameters include default settings based on a number of images printed on a single sheet as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives)

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include default settings based on a number of images printed on a single sheet as specified in the print operation (see *Fig. 3 wherein, for example, selector 248 changes the copy count to 2 whenever the document name ends with "JPG and the length set is one page because at least 50% of the time, according to the user print history 252, the user requests two copies of a document one page in length and ending in "JPG" [paragraph 0047]*).

There are applicable rationales for prima facie obviousness.

31. Watts and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*). See MPEP §2143 G.

#### ***Allowable Subject Matter***

32. **Claims 33, 34 and 39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As discussed above, Applicant's arguments with respect to the rejections of **claims 30, 32 – 36 and 38 – 40** under 35 U.S.C. §103(a) have been fully considered and are persuasive (*see Remarks 3/10/2010 [page 17]*). Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection for **claims of 30, 32, 35, 36, 38 and 40** is made in view of **Watts et al.** (U.S. Patent No. 6,559,971).

Although Rosekrans teaches the functionality as claimed, the Applicant has persuaded the Examiner that it is unobvious to one skilled in the art to incorporate the claimed functionality performed by the server disclosed in the prior art into the claimed printer.

### **Conclusion**

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Taylor et al.** (U.S. Patent No. 5,373,350) disclose xerographic/thermal ink jet combined printing (*see Abstract and Fig. 1*).

**Johnson et al.** (U.S. Patent No. 6,582,039) disclose a combination color inkjet and laser image-printing device with dual paper-picking mechanism (*see Abstract and Fig. 5*).



**Martin** (U.S. Patent Application Publication No. 2009/0279115) discloses automatically retrieving and configuring the print device to a set of device-specific system settings tailored for the user-selected media attributes (see *Abstract and Figs. 3 – 4*).

**Maeda** (U.S. Patent No. 6,725,770) discloses a hybrid printing apparatus (see *Abstract and Fig. 1*).

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571)272-5944. The examiner can normally be reached on 9AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Myles D. Robinson/  
Examiner, Art Unit 2625  
6/4/10

/Twyler L. Haskins/  
Supervisory Patent Examiner, Art Unit 2625